

My Vision of a Sustainable Future

University of Maryland

Wade Williams

Abstract

20 years from now in the year 2038, the world will be a very different place than it is today. Climate change becomes a top priority for the entire population of the Earth as natural disasters and many other issues surrounding the changing climate become more and more destructive. Massive steps are taken across the globe to rapidly increase reforestation efforts, cut out use of fossil fuels, and reverse the damage done to the planet by humans. The UN sustainability goals are put to full effect, and people everywhere choose a goal to focus on working towards. The infrastructure of entire nations begins to be overhauled and updated, especially as one of the largest producers of greenhouse gases – vehicles- are taken off the road and switched to electric.

When I close my eyes and envision how I want the world to look like in 20 years, I see many differences from how the world looks today. The world changes in each of the aspects of sustainability – economic, environmental, and social. I see a world threatened even more by hazards of the changing climate, but I also see a huge movement by almost the entire population of developed countries to finally address climate change. I see a global carbon tax going into effect 5 years from now, and 10 years from now there will be no more vehicles on the road powered by fossil fuels. In many developed countries most vehicles will also be automated. People in urban and suburban America will get rid of their personal vehicles, and ride in shared autonomous vehicles that transport people just like a taxi does today. In 20 years most of the world's population is in coastal urban areas, but after consecutive flooding events, a lot of cities on coastlines finally began building up further away from the oceans. By 2038, all cities will have moved their busiest areas away from the water and at least a half mile into the land.

Two epidemics have struck the world. A huge plague driven by disease-carrying ticks and mosquitoes affects the Americas, and much of Europe. The world population begins to decrease in 10 years due to this spread of deadly diseases, and after three consecutive years of heat waves, more intense storms, and flooding claims lives. By 2038, the world population will be at or below 6 billion people, and increasing at a more sustainable growth rate than the exponential rate in 2018. In 2038 the first manned Mars exploration program launches an exploration with 6 astronauts to Mars, to live there for 30 days and then return to Earth. A self-sustaining Martian colony is still a long way into the future, but the excitement of the first successful effort of living on Mars is comparable to the first lunar landing.

Back on Earth, in some parts of the world a lot of underground habitats are built due to rising temperatures in hotter areas of the world. In areas where temperatures become hot enough to

threaten people's lives, residents of the affected areas are picked up by automated shuttle buses that carry them to the shelters and they all stay there during the hottest point of the day. The underground habitats are naturally cooler because they are underground, and can hold hundreds of thousands of people.

Almost all of the world's energy comes from the big three: wind, solar, and tidal. Wind turbines in the ocean are mounted on floating platforms such as decommissioned oil rigs, so that they can adjust to the rising oceans and more intense storms. The rest comes from biomass and a few other new technologies. Transportation demands have been greatly reduced across the United States, and people that work office jobs have more freedom to choose their schedules, and working from home becomes a huge trend to keep vehicle traffic low. Almost 90% of the transportation in the United States is either automated or automated assist. Huge parking lots and parking garages become obsolete. Parking garages are all converted to house massive aquaponics and hydroponics systems, and parking lots are broken up and planted with trees or replaced with wetlands. Many roads fall into disrepair as the world looks towards flying cars. In addition, urban areas across the world undergo massive redesign and reconstruction, to make all buildings more sustainable and green. There is a huge trend in houseplant sales as people buy indoor plants to put inside newly redesigned buildings. The most popular house plants are on a list of air-filtering houseplants compiled by NASA. The redesign of infrastructure that we see and use in 2018 will be one of the biggest changes in 20 years, mainly due to rapid change of technology, and the effort to restore the natural balance that humanity has thrown off.